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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/772,478

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Barry Linkert

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EXAMINER

BETTIT, JACOB F

ART UNIT

PAPER NUMBER

2164

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/772,478

Applicant(s)

LINKERT ET AL.

Examiner

Jacob F. Betit

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2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040929.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### *Claim Objections*

1. Claim 1-20 objected to because of the following informalities:

Claim 1 uses “theretogether” in line 21. This is not a word and should be replaced with --together-- or the like.

Claims 2-14 are objected to for being dependent on claim 1.

2. Claim 4 uses “generater”, in line 5. This is not a word and should be replaced with --generator--.

3. Claims 5-7 are objected to for being dependent on claim 4.

4. Applicant is advised that should claim 2 be found allowable, claim 3 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

5. Claims 17-18 contain multiple steps that are not separated by line indentations. MPEP 608.01(m) states “Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation”.

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6. Many of the claim limitations are recited the passively or optionally. Although the claims are being rejected using art, the applicant is reminded “[l]anguage that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.” (See MPEP 2106 II. C.). The claims should be amended to remove limitations that could be interoperated optionally such as “said hash generator *selectably* for forming hash values”, “said content retriever *for* (having the intended use) retrieving data from the mobile-copy”, and “*selectably* sending first hash information from the mobile node to the network part”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: elements that cause “altering the data of at least one of the network-copy and the mobile-copy of the at least [first] database to place the network-copy and the mobile-copy in match with each other”. These elements are required by the preamble of the claim.

9. Claims 1-20 use various formats for referring to the at least first database, including: “the first database”, “the at least the first database”, “the network-copy”, and “the mobile-copy”. One standard method should be used to refer to “at least the first database” throughout the claims so that it is clear what is being referred to and the claims remain definite.

10. Claim 4 recites the limitation “the first-type hashes” in lines 1-2 and the limitation “the second-type hashes” in line 4. There is insufficient antecedent basis for these limitations in the claim.

11. Claims 5-7 are rejected for being dependent upon claim 4.

12. Claim 10 recites the limitation “the second hash-type”, in line 3. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 15 recites the step “comparing, at the network part, the first hash information sent during said operation of selectably sending with corresponding network-copy first hash information” twice. This renders the claim indefinite because it is not clear how the second recitation of this limitation is mean to further limit the claim. Further it is not clear which operation of comparing the first hash information is being referred to in the final step of claim 1.

14. Claims 16-20 are rejected for being dependent on rejected independent claim 15.

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15. Claims 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: steps that cause “altering the data of at least one of the network-copy and the mobile-copy of the at least the first database to place the network-copy and the mobile-copy in match with each other”. These steps are required by the preamble of the claim.

***Claim Rejections - 35 USC § 101***

16. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

17. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims do not recite a practical application by producing a physical transformation or producing a useful, concrete, and tangible result. To perform a physical transformation, the claimed invention must transform an article of physical object into a different state or thing. Transformation of data is not a physical transformation. A useful, concrete, and tangible result must be either specifically recited in the claim or flow inherently therefrom. To be useful the claimed invention must establish a specific, substantial, and credible utility. To be concrete the claimed invention must be able to produce the same results given the same initial starting conditions. To be tangible the claimed invention must produce a practical application or real world result. In this case the claims fail to perform a physical transformation because the claims are directed to operating on data. The claims are useful and concrete, but they fail to produce a tangible result because none of the claims require any result to be

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presented to the user or stored for later use. The only elements and steps that suggest a tangible result are in claims 12 and 18, but the result is only selectively obtained, and therefore no result need necessarily be realized.

*Claim Rejections - 35 USC § 102*

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

19. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Yianilos et al. (U.S. patent application publication No. 2002/0029214 A1).

As to claim 1, Yianilos et al. teaches an improvement of apparatus for [selectively] altering the data of at least one of the network-copy and the mobile-copy of the at least the first database to place the network-copy and the mobile-copy in match with each other, said apparatus comprising:

a hash generator embodied at the mobile node and adapted to receive representations of at least the mobile-copy of the at least the first database, said hash generator [selectively] for forming hash values responsive to the representations provided thereto, the hash values for communication to the network part to determine whether the network-copy and the mobile-copy are in match with one another (see paragraph 0013, paragraph 0025, paragraph 0062 and paragraph 0067); and

a content retriever embodied at the mobile node, said content retriever for retrieving data from the mobile-copy of the at least the first database upon detection of determination that the network-copy and the mobile-copy are out of match, the data retrieved by said content retriever for communication to the network part, to be used to match the network-copy and the mobile-copy [together] (see paragraph 0062 and paragraph 0067).

As to claim 2, Yianilos et al. teaches wherein said hash generator generates the hash values responsive to an external triggering event, occurrence of which is detectable at the mobile node (see paragraph 0083).

As to claim 3, Yianilos et al. the applicant is directed to the rejection of claim 2.

As to claim 4, Yianilos et al. teaches wherein said hash generator generates the first-type hashes upon detection of an external triggering event, indications of occurrence of which is detectable at the mobile node and wherein said hash generator generates the second-type hashes responsive to determination of mismatch of the first-type hashes, generated by said hash generator, with network-calculated values (see paragraph 0062 and paragraph 0067).

As to claim 5, Yianilos et al. teaches wherein the data maintained at the network-copy and the mobile-copy of the at least the first database is comprised of data records, each data



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record formed of fields including at least a first key field and at least a first record field, and wherein the second-type hashes [selectively] generated by said hash generator are formed of values of the at least the first key field (see paragraph 0069).

As to claim 6, Yianilos et al. teaches wherein the determination that the network-copy and the mobile-copy are out of match is made responsive to values of the second-type hashes formed of the values of the at least the key field (see paragraph 0067 and see paragraph 0083).

As to claim 7, Yianilos et al. teaches wherein the data retrieved by said content retriever comprises both the at least the first key field and the at least the first record field (see paragraph 0069).

As to claim 8, Yianilos et al. teaches a further improvement of apparatus for the network part also for [selectively] altering the data of at least one of the network-copy and the mobile-copy of the at least the first database, said apparatus comprising:

a determiner adapted to receive values of the hash generated by said hash generator, said determiner for determining whether the values of the hash correspond with locally-generated values (see paragraph 0083); and

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a requestor coupled to said determiner to receive indications of determinations made thereat, said requestor [selectively] for requesting additional information associated with the mobile-copy of the at least the first database (see paragraph 0067).

As to claim 9, Yianilos et al. teaches wherein the hash generated by said hash generator is [selectively] of a first hash-type and at least a second hash-type, and wherein the locally-generated values with which said determiner compares the hash are correspondingly [selectively] of a first hash-type and a second hash-type (see paragraph 0062 and paragraph 0067).

As to claim 10, Yianilos et al. teaches wherein the additional information requested by said requestor comprises a request for the mobile node to deliver hash information of the second hash-type to the comparator (see paragraph 0067).

As to claim 11, Yianilos et al. teaches wherein the data maintained at the network-copy and the mobile-copy of the at least the first database is comprised of data records and wherein the additional information requested by said requestor comprises a request for the mobile node to deliver values of at least portions of the data records (see paragraph 0067).

As to claim 12, Yianilos et al. teaches further comprising a comparator adapted to receive the values of the at least the portions of the data records responsive to the request therefor to the mobile node, said comparator for comparing the values with corresponding values of the network-copy of the at least the first database (see paragraphs 0081-0082).

As to claim 13, Yianilos et al. teaches further comprising a database value updater coupled to said comparator, said database value updater [selectively] operable responsive to comparisons made by said comparator to alter at least one data record of a selected one of the mobile-copy and the network-copy of the at least the first database (see paragraph 0067).

As to claim 14, Yianilos et al. teaches wherein said database value updater operates pursuant to a selected conflict resolution protocol (see paragraph 0082).

As to claim 15, Yianilos et al. teaches an improvement of a method for [selectively] altering the data of at least one of the network-copy and the mobile-copy of the at least the first database to place the network-copy and the mobile-copy in match with each other, said method comprising:

[selectively] sending first hash information from the mobile node to the network part, the first hash information representative of the mobile-copy of the first database (see paragraph 0013, paragraph 0025, paragraph 0062, and paragraph 0067);

comparing, at the network part, the first hash information sent during said operation of [selectively] sending with corresponding network-copy first hash information (see paragraph 0062 and paragraph 0067); and

[selectively] requesting additional information regarding the mobile-copy first database responsive to comparisons made during said operation of comparing the first hash information (see paragraph 0067).

As to claim 16, Yianilos et al. teaches wherein the additional information requested during said operation of [selectively] requesting comprises second hash information from the mobile node to the network part, the second hash information also representative of the mobile copy of the at least the first database (see paragraph 0062 and paragraph 0067).

As to claim 17, Yianilos et al. teaches further comprising the operations of:

sending the second hash information from the mobile node to the network part (see paragraph 0067);

comparing, at the network part, the second hash information sent during said operation of sending the second hash information with corresponding network-copy second hash information (see paragraph 0067 and paragraph 0083); and

[selectively] requesting at least portions of the mobile-copy of the at least the first database responsive to comparisons made during said operation of comparing the second hash information (see paragraph 0067).

As to claim 18, Yianilos et al. teaches further comprising the operations of:

delivering the at least the portions of the mobile-copy to the network part (see paragraph 0067),

comparing the portions of the mobile copy delivered during said operation of delivering with corresponding portions of the network-copy of the at least the first database (see paragraph 0067 and paragraph 0083), and

[selectively] causing overwriting of the portions of a selected one of the network-copy and the mobile-copy responsive to comparisons made during said operation of comparing the portions of the mobile-copy (see paragraph 0067).

As to claim 19, Yianilos et al. teaches wherein the selected one of the network-copy and the mobile-copy of which the portions thereof are [selectively] caused to be overwritten is selected according to a conflict resolution scheme (see paragraph 0062 and see paragraph 0067).

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As to claim 20, Yianilos et al. teaches further comprising the operation of creating a change-history by indicating overwriting of the portions [selectively] caused during said operation of [selectively] causing.

*Conclusion*

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob F. Betit whose telephone number is (571) 272-4075. The examiner can normally be reached on Monday through Friday 9:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

jfb  
29 Aug 2006

  
**SAM RIMELL**  
**PRIMARY EXAMINER**